Through improved and more scientific operation and maintenance practices, unplanned down time is **kept** to a minimum.

562. *[Transferred to the 26th July,* 1989]

Process for extraction of kerosene and diesel from natural gas

563. SHRI MAHENDRA PRASAD: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether the National Chemical Laboratory, Pune has been successful in developing a process for extraction of kerosene and diesel from natural gas; and

(b) whether any scheme for extraction of kerosene and diesel has since been worked out, if so, what are the details thereof ?

THE MINISTER OF STATE OF THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI BRAHM DUTT): (a) and (b) The conversion of natural gas to kerosene and diesel invoves the following stages:

(i) Natural gas to Methanol

(ii) Methanol to Olefins

(iii) Olefins to middle distillates, *viz.,* kerosene and diesel.

The National Chemical Laboratory, Pune has developed catalysts for converting Methanol to Olefins and Olefins to Kerosene and diesel. Conversion of natural gas to methanol is a well established process.

In order to prove the catalysts developed by the NCL on commercial grounds, it has been proposed to set up a pilot plant a **BPCL** Refinery, Bombay jointly by **the** National Chemical Laboratory , BPCL and Davy **Power Gas India** Pvt. Ltd. The cost of **the pilot plant** is estimated to be Rs. 6 **crores and** the capacity would be **one tonne** per day of kerosene and **diesel.**

Hike in coal prices

564. **SHRIMATI KANAKMU**KHERJEE: Will the Minister **of** ENERGY be pleased to state;

(a) what is the average **price of** coal (per tonne) since nationalisation of coal Industry **year-wise,** upto the 1st January, **1989;**

(b) on how many occasions since nationalisation there have **been hike** in coal prices (average per **tonne)** and the extent thereof **on each** occasion (in rupee as well as in per cent);

(c) what are the reasons **for this** frequent price hike; and

(d) the total **revenue realised** through price hike **year-vise** from 1980 to 1989?

THE MINISTER **OF STATE IN THE DEPARTMENT OF** COAL IN THE **MINISTRY OF** ENERGY (SHRI C. **R. JAFFAR** SHARIEF): (a) and (b) Revisions made in the average pit-head **price** of coal for Coal India **Ltd. since** nationalisation of Coal **Industry** are indicated in the **statement** annexed. *(See* below)

(c) The increase **in the price of** coal has been necessitated **because** of increase in the cost of **production** due to escalation in **the** cost **of** inputs *viz.* wages, **VDA, stores,** power, capital cost etc.